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By Marcel B. Malley

ABSTRACT

A case involving the identification of Chinese handwriting is reported. The writing was in modern style, left to right in horizontal lines going down the page using a ballpoint pen. A survey of professional literature regarding examination of Chinese handwriting provided two sets of guidelines: One set derived from the unique features of Chinese characters, and, the other set which embodies the very same procedures used in the examination of occidental handwriting. The paper concludes with description and illustration of some of the comparative examination.

THE PROBLEM

A Chinese gentleman, native to The Bay Area, had courted a lady from mainland China via a magazine devoted to personal ads for Asian women. Obtaining an introduction through the journal's services, the two corresponded. Eventually the lady came to this country and the two of them married. She immediately refused to live as a married couple and proceeded to pursue a career interest. The gentleman filed for divorce, which could expose the lady to deportation procedures. In defense, the lady denied having written or signed any document which went through the magazine. She admitted to having written the letters which the gentleman received bearing her signature and return address. The gentleman asked whether or not the handwriting and signature on the magazine's records could be identified as being the lady's. Preliminary examination of photocopies promised positive results, so an appointment was made with the magazine's manager to inspect the original documents at the magazine's office.

All the writing involved was from left to right across the page in lines which progressed from top to bottom. It would be increasingly rare to encounter the traditional direction from top to bottom in columns progressing from right to left. However, when Chinese is written in that traditional fashion, the characters are still made in the same way as prescribed for the modern direction of writing, which is described later. For example, horizontal strokes in classical Chinese writing were to be made left to right, although the columns of writing progressed right to left.

Preliminary to going to the office, the books and journal articles in my collection relative to Chinese handwriting were reviewed, particularly forensic journal articles on the identification of Chinese handwriting. Several of these were based on primary, empirical research work and many were authored or co-authored by Chinese experts in the orient. At the magazine's office, the original documents which the lady denied having written and signed were examined and photographed. It was determined that a positive and definite identification was supported by the facts and that court exhibits to demonstrate the reasons why would employ standard methods.

A conference with the gentleman and his attorney resulted in agreement that the handwriting expert testimony could be properly and cogently presented. Trial preparation would focus on proving the genuineness of the lady's Chinese and English signatures on the magazine's records, using her correspondence to the gentleman and legal documents in the case as

exemplars. Upon arrival at court for the bench trial, the attorney informed me that the lady had in the meantime stated that the previously disputed signatures were indeed hers, but that the other disputed writings were not. I had to revamp the content and order of testimony, rearrange and eliminate some exhibits, and write out a new set of questions for the attorney to ask during my testimony in chief.

As I was approaching the witness stand, the attorney for the lady objected to my being called. She stipulated that all of the writing on the magazine's records were by her client, except for a few key items. The attorney calling me said I would still have to testify as to the remaining writing which was denied and as to my charges, since the gentleman's attorney was going to ask for an order for the lady to reimburse my fees. After I was sworn and stated my name, etc., the gentleman's attorney asked if he could clarify the stipulation. He then asked the lady's attorney if the stipulation covered ALL the writing purportedly by her client; his wording included the few items she had hedged on as I had approached the stand. With a slight pause, the stipulation was given as to all purported writings by the lady. I thus had my proffered expert evidence stipulated to by both parties, and I only had to testify as to the amount and reasons for my charges.

Without a thorough preparation by both the attorney and myself which enabled us to work together to handle any eventuality at trial, the stipulation would not have been forthcoming. An essential basis of all of this was a thorough study of the relevant professional literature which provided a proper foundation for presentation of my qualification to testify as to Chinese handwriting and enabled us to meet any potential challenge to my qualifications. It also prepared the attorney and me to present the evidence clearly and convincingly.

The following provides this information in three parts. First, a survey of the relevant literature. Second, summary of the guidelines for making an examination of Chinese handwriting. Third, application of some of these guidelines to writings from the case.

SURVEY OF THE LITERATURE

A. JOURNAL ARTICLES

1. FBI LAW ENFORCEMENT BULLETIN. 61:10-15, March 1992.

A guide to Chinese names.

Author(s): Anderson, C. Fredric. Levy, Henriette Liu.

This is not about the examination of Chinese handwriting, but how the sound of Chinese names is transliterated into English with the problems which result.

2. FORENSIC SCIENCE SOCIETY JOURNAL. 25:255-67, 1985.

Comparative approach to the examination of Chinese handwriting: the Chinese character.

Author(s): Leung, S. C. Tsui, W. L. Cheung, W. L. Chung, M. W. L.

This is an exceptionally good handwriting identification article and a rich source of ideas. One can cross-apply these ideas between Eastern and Western handwritings. The caution is that

one must know what features can be validly compared to what others, and how to do so correctly. Study this paper.

3. FORENSIC SCIENCE SOCIETY JOURNAL. 27:157-73, 1987.

Comparative approach to the examination of Chinese handwriting. Pt. 2: Measurable parameters.

Author(s): Leung, S. C. Chung, M. W. Tsui, C. K. Cheung, W. L. Cheung, S. Y. L. Mok, M. M. C.

Based on an excellent scientific, empirical study of 438 subjects, the paper supports the validity of handwriting identification with statistical tables covering width/height ratios, angles, symmetry and other features.

4. FORENSIC SCIENCE SOCIETY JOURNAL. 28:149-65, May-June 1988.

Comparative approach to the examination of Chinese handwriting; Part three: Disguise.

Author(s): Leung, S. C. Chung, M. W. L. Tsui, C. K. Cheung, Y. L.

The authors continue their high quality research with 437 subjects making normal and disguised writings involving 98 common Chinese characters. Results are tabulated and discussed. They confirm similar studies in occidental languages.

5. FORENSIC SCIENCE SOCIETY JOURNAL. 29:77-89, March-April 1989.

A comparative approach to the examination of Chinese handwriting; Part 4: Identification by statistical classification techniques.

Author(s): Cheung, Y. L. Leung, S. C.

The authors define terms accurately and set forth their protocol and mathematical formulae. They use precise methods and provide a good example for other researchers to follow. Unfortunately, they do not quite go to the heart of the graphic movement.

6. FORENSIC SCIENCE SOCIETY JOURNAL. 33:9-19, Jan. 1993.

A comparative approach to the examination of Chinese handwriting. Part 5: Qualitative parameters.

Author(s): Leung, S. C. Cheung, W. L. Fung, H. T.

Maintaining the excellent quality of the series, the authors identify features which are applicable to English handwriting. They are expert at both, since they work in Hong Kong. Again they provide rich statistical tables and clear samples of illustrative writings. Most of the paper is devoted to features special to Chinese writing.

7. JAPANESE JOURNAL OF PSYCHOLOGY. 12:608-13, 1937.

On the direction and order of the strokes in writing Chinese characters.

Author(s): Homma, T.

I have not seen this paper, but include it in case you have opportunity to see it.

8. JOURNAL OF FORENSIC IDENTIFICATION. 43:252-65, 1993.

English versus Chinese.

Author(s): McKasson, Stephen C.

This is easily the weakest and least valuable paper listed. He exhibits the very common misunderstanding of the foundations of handwriting identification, which he gives as threefold.

1. No two people have the same handwriting.

However, that has never been scientifically verified, while in fact there have been cases where two different people had handwritings which did not exhibit such significant differences which would positively prove them not to be by the same person.

2. Handwriting is an unconscious act.

That is literally so only if the person writes while unconscious, as in hypnotism or sleep walking. A person consciously chooses to write something! There are aspects of writing of which the person is unaware, and if the person is writing with attention focused only on the communication of the message, there is no conscious modification of the writing. All that is entirely different from a bald statement that handwriting is an unconscious act.

3. Handwriting habits are stable.

By definition habits are both stable and not stable, depending on what one means by "stable." The habit certainly did not exist stably before it was formed, nor did it exist in the same manner before and after it was modified for any reason. Further, a person's habit may well be some kind of instability, such as when one cannot even be bothered to make a given feature in a consistent manner. Lastly, there are numerous factors which alter handwriting and thus create instability in handwriting habits. These are not the only incorrect concepts shared by many handwriting experts relative to the nature of handwriting and to the principles which make it identifiable. Note that these and similar assumptions are the very things which must be proved concerning the specific writing to be identified, and making such global assertions merely begs the question involved in the actual proof. Yet cross-examiners let us get away with it.

With that basis for his discussion, the author successfully abstains from any reliable guidelines for examination of Chinese handwriting, nor any other handwriting for that matter.

9. JOURNAL OF FORENSIC SCIENCES. 34:439-48, March 1989. (C)

Preliminary classification of the writing elements of Chinese characters.

Author(s): Hanna, Georgia A.

The author never quite gets to the essentials of handwriting nor to fulfilling the title's promise. There are some standard American expert misconceptions about handwriting, such as tapering strokes mean fast writing and blunt strokes mean slow, as if a slow writer could not lazily ease in and out of the strokes or a fast writer could not have screeching starts and stops. Nevertheless, one could beneficially read this before the series of five papers listed above, as she gives some easily grasped, general ideas and occasionally perceptive remarks.

10. JOURNAL OF POLICE SCIENCE AND ADMINISTRATION. 2:279-87, 1974. (C)

Examination of ideographic handwriting. Chinese and Japanese.

Author(s): Crown, David A. Shimaoka, Taro.

This also could serve as background before taking the series of five papers cited above. It provides more practical hints than the previous paper by Hanna.

B. BOOKS AND MONOGRAPHS

All of these are in my personal collection. None are recommended particularly for your acquisition, unless explicitly stated.

11. Addiss, Stephen & Kwan S. Wong.

Obaku; zen painting and calligraphy.... Exhibition organized by the Helen Foresman Spencer Museum of Art.... Lawrence, KS, The Museum, 1978.

There is some discussion of how forgeries of classical Oriental calligraphy are identified.

12. Aria, Barbara.

The nature of the Chinese character. Calligraphy by Russell Eng Gon, illus. by Lesley Ehlers. New York, Simon & Schuster, 1991.

This is a "school model" book for very common characters. You should have some kind of Chinese "penmanship" text in your collection.

13. Hardless and Hardless.

Forgery in India; a practical treatise on the detection of forgery dealing with the languages of India.... Chunar, India, The Sanctuary, 1920.

A father and son team describe how they made handwriting identification of skilled forgeries between and across writings in different languages, Chinese being one. They did not have to know either or both of the languages to do so. Another book by the two plus one by the son explore the matter more fully. However, one ought not attempt that cross-language feat without full mastery of the physiology of handwriting and of the tools and materials employed in the samples to be examined. If you can obtain a Hardless book, do so.

14. Kwo, Da-Wei.

Chinese brushwork; its history, aesthetics and techniques. Montclair, NJ, Allanheld and Schram, 1981.

For the Chinese, writing was essentially an art form which in classical times was considered prior and superior to painting and drawing.

15. McAlexander, Thomas V.

A forensic journey into the People's Republic of China. 45th annual meeting of the AAFS. Boston, MA, Feb. 15-20, 1993.

It should be titled a tourist jaunt with a superficial forensic touch. He made a 20 second examination of a Chinese signature case and agreed with his hosts. Later he explained how he often gave "no conclusion" opinions, which was routine and seemingly expected in his circles. The only value of this item is to impeach him if you oppose him.

16. Sogen, Omori and Terayama Katsujo.

Zen and the art of calligraphy: The essence of Sho. Trans. by John Stevens. London, Routledge & Kegan Paul, 1983.

This was my first introduction to classical Oriental calligraphy, which I consider the penultimate handwriting. It has a brief discussion of forged works.

17. Wang, Wan-go.

Chinese painting and calligraphy; a pictorial survey. 69 fine examples from the John M. Crawford, Jr. collection; with a preface by Thomas Lawton. New York, Dover Publ., 1978.

More of an art illustration book.

18. Yee, Chiang.

Chinese calligraphy; an introduction to its aesthetic and technique. With a foreword by Sir Herbert Read. 3rd ed. Cambridge, MA, Harvard Univ. Pr., 1973.

This is a standard classic on the topic. If you have an opportunity to acquire this book, do so.

FUNDAMENTALS OF A COMPARATIVE EXAMINATION OF CHINESE HANDWRITING

The following are the more fundamental, less technical guidelines gathered from the above cited works. Not being a speaker or reader of Chinese, I do not include the linguistic niceties.

1. Obtain the assistance of someone who speaks and reads Chinese and who will identify for you the various characters and combinations of characters which can be compared across the samples under consideration and with the penmanship model.
2. The student is taught to write all the characters within imaginary boxes of equal size. As the writer alters the relative proportions of the imaginary box for different characters, width/height ratio becomes a very important identifying trait.
3. As the writer extends selected strokes beyond the boundaries of the imaginary box, uniquely individual writing traits are developed.
4. The basic model for each character prescribes that the strokes be made in a correct sequence and be written separately with a correct placement. Different writers will alter both the sequence and relative placement of strokes in various ways.
5. Increase in the speed of the writing will alter handwriting features in the same way as speed will in English: simplification of strokes, running together of strokes, alteration of slant, etc.
6. The model character has a symmetry whereby it is balanced on both a horizontal and vertical axis. Alteration of this symmetry and shifting of these axes progress in individually

distinct ways.

7. If a character contains multiple horizontal or vertical strokes, they ought to be written parallel. Diagonal and angled strokes have prescribed values. The relative angles of strokes to each other and their divergence from the prescribed model provide the same angle value we find in English letters.

8. Pen emphasis is as important as it is in the identification of English handwriting, but in Chinese many more subtleties are possible.

9. Divergence from the rules for Chinese handwriting, like those from the school model in English, makes for identifying traits. The more general rules for writing the strokes of Chinese characters, other than the tick, are as follows:

- (a) Component strokes are made in a descending order;
- (b) Horizontal strokes are written in a left to right direction;
- (c) Peripheral strokes are written before the central strokes; and
- (d) Strokes are written separately and completely.

10. There are different styles of Chinese writing. The major two are:

- (a) Regular style wherein strokes are written separately and radicals are not connected; and
- (b) Running or cursive style which is characterized by connections and simplification.

11. There are eight basic strokes in Chinese writing. Most important for our summary considerations are:

- (a) Horizontal strokes which should all be parallel;
- (b) Vertical strokes which also should all be parallel;
- (c) Slanting strokes which move downward to the left or downward to the right;
- (d) Angled strokes which should be written with a prescribed orientation and number of degrees for a given character; and
- (e) The tick, which, by way of over-simplification, could be compared to our i-dot.

12. As mentioned already, the same general rules employed in a comparative examination of Western handwriting apply to Chinese handwriting.

13. For best results, exemplars should:

- (a) Have the same characters as the disputed writing and in the same order,
- (b) Be in the same style of writing, and
- (c) Be from the same system of writing if the person knows more than one system, such as both English and Chinese.

There are many fine points which you can study in the works cited above. The ones here are the ones which are most basic and which you would generally want to cover in a report or

testimony.

SAMPLE COMPARATIVE WRITINGS

The signature is not considered out of respect for the litigant's privacy. The application referred to in the figures is the application with the magazine whereby the lady agreed to pay them a fee for listing her in the magazine and another fee if she married someone they introduced her to. The letters and the envelope referred to are from her correspondence with the gentleman who later married and was now divorcing her.

Figure One compares numerals. Modern practice in Chinese is to employ arabic numerals. Generally Chinese schools, even outside of China, give great emphasis to mathematics. Notice the lady has consistency in style, in relative size, and in slant. Even more telling is the manner in which she orients each individual numeral in a downward direction to the right. She is right handed, and this results from the manner in which she positions her arm during writing, which will be described later. As a result of her arm positioning, each character has its own base line, as she must reposition the hand in order to avoid a precipitously descending base line.

Figure two compares almost identical phrases. In the remark from the application she stated that her father had died. In the letter she said that she could empathize with the gentleman when he said that his father had died. We thus have five characters from each document, four of which are the same and in the same order. Notice that the horizontal strokes descend to the right. The arm is held laterally out from the body with the elbow close in to the body. Since for modern Chinese writing the pen is held as in Western writing, in this case a ballpoint, the fingers are oriented slightly downwards to the right in their abductive movement, while down strokes tend to point back to the left more or less in alignment with the arm. It would take a perceptive observer of handwriting to deduce and imitate that graphic movement.

Note also in Figure Two how similar strokes in the same characters tend to maintain the same relative positions and proportions. The spacing of characters remains within a range to the point of being fairly exact. She writes with what we would call a letter impulse, as each character is made by a separate graphic act and the hand is repositioned for each one.

Figure Three gives her residential address from the application and from an envelope sent to the gentleman. Since the enlargement exceeds the full width of the 11 X 17 sheet prepared for court, part of the address is placed on a lower line, although in both originals it was all on the same line. The millimeter scale provides a reference for the degree of enlargement.

The differences in the two samples are reasonably explained by the space available for each. On the envelope there was no preprinted box or prior writing to obstruct the lower limits of the address. Notice how the downstroke of the first and fourth characters descends freely far beyond the imaginary box of the prescribed rule. In the application the address was to be placed within a pre-printed actual box, below which other writing appeared. Thus the descending vertical in the first and fifth characters, the same characters as the first and fourth on the

envelope, is comparatively very restrained. Despite the obvious effect overall which the reduced space has on her writing, we can see the same descending horizontals and same "letter" impulse as before, the same proportion and ratio of strokes within characters, and the same tendency of the vertical to point down the arm.

You might go through the 13 basic points for examination of Chinese handwriting and see how you do with them. But give special note to the individualistic manner of positioning and moving the pen as being fundamental to any identification in any language or style of writing. It is the physiological factors of the writing which make it ultimately identifiable.

5'5" (168cm)

Height listed on application

高 168cm.

Height from letter dated 29/11-93

5519189 (T#)

Residential phone number from application

5519189.

Telephone number from letter, 17-DEC-93

EXHIBIT 1

父亲已去世。

"Remark" from application

父亲前去世

1st line, 2nd paragraph, letter, 17-DEC-93

EXHIBIT 2

丁州市. 天河体

Residential address from application

丁州市. 天河体

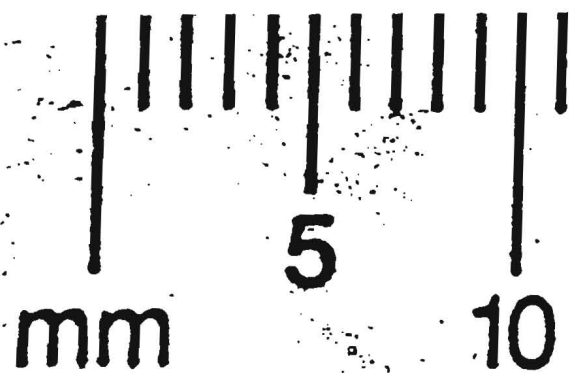


EXHIBIT 3

廣東路 街

64号 801 房.

廣東路

Return address from envelope

街 64号 801

MARCEL B. MATLEY
DOCUMENT EXAMINATION
MATLEYHWXPRT@AOL.COM
SINCE 1985

(3092 CESAR CHAVEZ ST., 94110)
POST OFFICE BOX 882401
SAN FRANCISCO, CA 94188
www.handwritingexpertconsultant.com

PHONE: (415) 824-1330
CELL: (415) 753-2832
FAX: (415) 824-0806
1-800-367-8403

CURRENT CONTACT INFORMATION

FOR MARCEL B. MATLEY

Since this publication was issued, certain changes were made in the means of communicating with and contacting me. The physical street address, 3092 Cesar Chavez St., San Francisco, CA 94110, remains the same as does the Postal Service mail box, PO Box 882401, San Francisco, CA 94188-2401. Please mail to the postal box number since it is a secure service. Local delivery is occasionally misplaced or put into the mail slot of the wrong house.

My web site is www.handwritingexpertconsultant.com.

My e-mail address is matleyhwexpirt@aol.com. Please note AOL did not permit me to have the second "e" in "expert." I have no idea why.

My office phone is 415-824-1330, and my fax is 415-824-0806. My cell number is 415-753-2832.

If I cannot assist you for any reason, I will endeavor to assist you in finding a reliable expert.